

IN THE SPECIFICATION

Please amend paragraph [0006] of the specification, as follows:

Patent Document 1: Japanese Patent Application Laid-Open No. 2002-152246

Nonpatent Literature 1: Taiga Aoki, “‘Spam Slicer’, a service for rooting up spam

mails, has been started in the United States”, [online], [retrieved on October 15, 2003.],

Internet <URL: <http://internet.watch.impress.co.jp/www/article/2003/0613/spam.htm>>

Please amend paragraph [0011] of the specification, as follows:

It is an object of the present invention to at least solve the problems in the conventional technology.

According to an embodiment claim 1 of the present invention, a mail delivery system is constructed such that it receives an alias mail having an alias address different from a recipient address as a destination and replaces the destination with the recipient address to transfer the alias mail and receives a reply mail responding to the alias mail and replaces the recipient address with the alias address as a transmission source of the reply mail to transfer the reply mail, wherein the mail delivery system includes: an alias mail processing unit that restores, when an alias mail having an alias address generated from the recipient address and a predetermined generation argument as a destination is received, the recipient address and the generation argument from the alias address, replaces the destination of the alias mail with the recipient address, and includes the generation argument in the alias mail to transfer to alias mail; and a reply mail processing unit that acquires, when a reply mail responding to the alias mail transferred by the alias mail processing unit is received, the generation argument from the reply mail, regenerates the alias address from the generation argument and a recipient address indicating a transmission source of the reply mail, and replaces the transmission source of the reply mail with the alias address to transfer the reply mail.

Please amend paragraph [0012] of the specification, as follows:

According to another embodiment ~~claim 2~~ of the present invention, the alias mail processing unit includes: a recipient address restoring unit that restores, when the alias mail is received, the recipient address and the generation argument from the alias address; a reply destination address generating unit that generates a reply destination address including the generation argument restored by the recipient address restoring unit and an originator address indicating a transmission source of the alias mail; and an alias mail transfer unit that replaces the destination of the alias mail with the recipient address restored by the recipient address restoring unit and replaces the transmission source of the alias mail with the reply destination address generated by the reply destination address generating unit to transfer the alias mail, and the reply mail processing unit includes: an originator address restoring unit that restores, when the reply mail is received, the originator address and the generation argument from the reply destination address that is a destination of the reply mail; an alias address regenerating unit that regenerates the alias address from the generation argument restored by the originator address restoring unit and the recipient address indicating the transmission source of the reply mail; and a reply mail transfer unit that replaces the destination of the reply mail with the originator address restored by the originator address restoring unit and replaces the transmission source of the reply mail with the alias address regenerated by the alias address regenerating unit to transfer the reply mail.

Please amend paragraph [0013] of the specification, as follows:

According to another embodiment ~~claim 3~~ of the present invention, the generation argument is information indicating transfer conditions that the alias mail transferred to the recipient should satisfy, the alias mail processing unit further includes a transfer possibility

judging unit that judges whether the alias mail satisfies transfer conditions restored by the recipient address restoring unit, and the alias mail transfer unit transfers only an alias mail that is judged by the transfer possibility judging unit as satisfying the transfer conditions.

Please amend paragraph [0014] of the specification, as follows:

According to another embodiment ~~claim 4~~ of the present invention, the transfer conditions are transfer conditions that can be updated according to transfer of the alias mail, the alias mail processing unit further includes a transfer conditions updating unit that updates, when it is judged by the transfer possibility judging unit that the transfer conditions are satisfied, the transfer conditions to generate the generation argument anew, and the reply destination address generating unit generates a reply destination address including the generation argument generated anew by the transfer conditions updating unit instead of the generation argument restored by the recipient address restoring unit.

Please amend paragraph [0015] of the specification, as follows:

According to another embodiment ~~claim 5~~ of the present invention, the transfer conditions are transfer conditions that can be updated according to reception of the alias mail, the reply mail processing unit further includes a transfer conditions updating unit that updates the transfer conditions restored by the originator address restoring unit to generate the generation argument anew, and the alias address regenerating unit regenerates an alias address including the generation argument generated anew by the transfer condition updating unit instead of the generation argument restored by the originator address restoring unit.

Please amend paragraph [0016] of the specification, as follows:

According to another embodiment claim 6 of the present invention, a mail transfer system that transfers a mail using a recipient alias address generated from a recipient address and a predetermined recipient generation argument and an originator alias address generated from an originator address and a predetermined originator generation argument, includes: a first mail processing unit that restores, when a mail having with a recipient reply destination address generated from the recipient alias address and the originator generation argument as a destination is received, the recipient alias address and the originator generation argument from the recipient reply destination address, regenerates the originator alias address from the originator generation argument and the originator address indicating a transmission source of the mail, and replaces the destination and the transmission source of the mail with the recipient alias address and the originator alias address to transfer the mail; a second mail processing unit that restores, when a mail having the recipient alias address and the originator alias address as a destination and a transmission source is received, the recipient address and the recipient generation argument from the recipient alias address, generates an originator reply destination address from the recipient generation argument and the originator alias address, and replaces the destination and the transmission source of the mail with the recipient address and the originator reply destination address to transfer the mail; a third mail processing unit that restores, when a reply mail having the originator reply destination address and the recipient address as a destination and a transmission source is received, the originator alias address and the recipient generation argument from the originator reply destination address, regenerates the recipient alias address from the recipient generation argument and the recipient address, and replaces the destination and the transmission source of the mail with the originator alias address and the recipient alias address to transfer the mail; and a fourth mail processing unit that restores, when a reply mail having the originator alias address and the recipient alias address as a destination and a transmission source is

received, the originator address and the originator generation argument from the originator alias address, generates a recipient reply destination address from the originator generation argument and the recipient alias address, and replaces the destination and the transmission source of the mail with the originator address and the recipient reply destination address to transfer the mail.

Please amend paragraph [0017] of the specification, as follows:

According to another embodiment ~~claim 7~~ of the present invention, the recipient generation argument is information indicating transfer conditions that the mail transferred to the recipient should satisfy and the originator generation argument is information indicating transfer conditions that the mail transferred to the originator should satisfy, the second mail processing unit judges whether the mails satisfy transfer conditions related to the recipient generation argument restored from the recipient alias address and transfers only a mail that satisfies the transfer conditions, and the fourth mail processing unit judges whether the mails satisfy transfer conditions related to the originator generation argument restored from the originator alias address and transfers only a mail that satisfies the transfer conditions.

Please amend paragraph [0018] of the specification, as follows:

According to another embodiment ~~claim 8~~ of the present invention, a mail delivering method for receiving an alias mail having an alias address different from a recipient address as a destination and replacing the destination with the recipient address to transfer the alias mail, and for receiving a reply mail responding to the alias mail and replacing the recipient address with the alias address as a transmission source of the reply mail to transfer the reply mail includes: an alias mail processing step for restoring, when an alias mail having an alias address generated from the recipient address and a predetermined generation argument as a

destination is received, the recipient address and the generation argument from the alias address, replacing the destination of the alias mail with the recipient address, and including the generation argument in the alias mail to transfer to alias mail; and a reply mail processing step for acquiring, when a reply mail responding to the alias mail transferred by the alias mail processing unit is received, the generation argument from the reply mail, regenerating the alias address from the generation argument and a recipient address indicating a transmission source of the reply mail, and replacing the transmission source of the reply mail with the alias address to transfer the reply mail.

Please amend paragraph [0019] of the specification, as follows:

According to another embodiment claim 9 of the present invention, the alias mail processing step includes: a recipient address restoring step for restoring, when the alias mail is received, the recipient address and the generation argument from the alias address; a reply destination address generating step for generating a reply destination address including the generation argument restored by the recipient address restoring unit and an originator address indicating a transmission source of the alias mail; and an alias mail transferring step for replacing the destination of the alias mail with the recipient address restored by the recipient address restoring unit and replacing the transmission source of the alias mail with the reply destination address generated by the reply destination address generating step to transfer the alias mail, and the reply mail processing step includes: an originator address restoring step for restoring, when the reply mail is received, the originator address and the generation argument from the reply destination address that is a destination of the reply mail; an alias address regenerating step for regenerating the alias address from the generation argument restored by the originator address restoring step and the recipient address indicating the transmission source of the reply mail; and a reply mail transferring step for replacing the destination of the

reply mail with the originator address restored by the originator address restoring step and replacing the transmission source of the reply mail with the alias address regenerated by the alias address regenerating step to transfer the reply mail.

Please amend paragraph[0020] of the specification, as follows:

According to another embodiment ~~claim 10~~ of the present invention, the generation argument is information indicating transfer conditions that the alias mail transferred to the recipient should satisfy, the alias mail processing step further includes a transfer possibility judging unit that judges whether the alias mail satisfies transfer conditions restored by the recipient address restoring step, and the alias mail transfer unit transfers only an alias mail that is judged by the transfer possibility judging step as satisfying the transfer conditions.

Please amend paragraph [0021] of the specification, as follows:

According to another embodiment ~~claim 11~~ of the present invention, a mail transferring method for transferring a mail using a recipient alias address generated from a recipient address and a predetermined recipient generation argument and an originator alias address generated from an originator address and a predetermined originator generation argument, the mail transfer method comprising: a first mail processing step for restoring, when a mail having with a recipient reply destination address generated from the recipient alias address and the originator generation argument as a destination is received, the recipient alias address and the originator generation argument from the recipient reply destination address, regenerating the originator alias address from the originator generation argument and the originator address indicating a transmission source of the mail, and replacing the destination and the transmission source of the mail with the recipient alias address and the originator alias address to transfer the mail; a second mail processing step for restoring, when

a mail having the recipient alias address and the originator alias address as a destination and a transmission source is received, the recipient address and the recipient generation argument from the recipient alias address, generating an originator reply destination address from the recipient generation argument and the originator alias address, and replacing the destination and the transmission source of the mail with the recipient address and the originator reply destination address to transfer the mail; a third mail processing step for restoring, when a reply mail having the originator reply destination address and the recipient address as a destination and a transmission source is received, the originator alias address and the recipient generation argument from the originator reply destination address, regenerating the recipient alias address from the recipient generation argument and the recipient address, and replacing the destination and the transmission source of the mail with the originator alias address and the recipient alias address to transfer the mail; and a fourth mail processing step for restoring, when a reply mail having the originator alias address and the recipient alias address as a destination and a transmission source is received, the originator address and the originator generation argument from the originator alias address, generating a recipient reply destination address from the originator generation argument and the recipient alias address, and replacing the destination and the transmission source of the mail with the originator address and the recipient reply destination address to transfer the mail.

Please amend paragraph [0022] of the specification, as follows:

According to another embodiment ~~claim 12~~ of the present invention, the recipient generation argument is information indicating transfer conditions that the mail transferred to the recipient should satisfy and the originator generation argument is information indicating transfer conditions that the mail transferred to the originator should satisfy, the second mail processing step judges whether the mails satisfy transfer conditions related to the recipient

generation argument restored from the recipient alias address and transfers only a mail that satisfies the transfer conditions, and the fourth mail processing step judges whether the mails satisfy transfer conditions related to the originator generation argument restored from the originator alias address and transfers only a mail that satisfies the transfer conditions.

Please amend paragraph [0023] of the specification, as follows:

According to another embodiment ~~claim 13~~ of the present invention, a mail delivering program that causes a computer to receive an alias mail having an alias address different from a recipient address as a destination and replace the destination with the recipient address to transfer the alias mail, and to receive a reply mail responding to the alias mail and replace the recipient address with the alias address as a transmission source of the reply mail to transfer the reply mail, the mail delivering program comprising: an alias mail processing procedure for restoring, when an alias mail having an alias address generated from the recipient address and a predetermined generation argument as a destination is received, the recipient address and the generation argument from the alias address, replacing the destination of the alias mail with the recipient address, and including the generation argument in the alias mail to transfer to alias mail; and a reply mail processing procedure for acquiring, when a reply mail responding to the alias mail transferred by the alias mail processing unit is received, the generation argument from the reply mail, regenerating the alias address from the generation argument and a recipient address indicating a transmission source of the reply mail, and replacing the transmission source of the reply mail with the alias address to transfer the reply mail.

Please amend paragraph [0024] of the specification, as follows:

According to another embodiment ~~claim 14~~ of the present invention, the alias mail processing procedure includes: a recipient address restoring procedure for restoring, when the alias mail is received, the recipient address and the generation argument from the alias address; a reply destination address generating procedure for generating a reply destination address including the generation argument restored by the recipient address restoring unit and an originator address indicating a transmission source of the alias mail; and an alias mail transferring procedure for replacing the destination of the alias mail with the recipient address restored by the recipient address restoring unit and replacing the transmission source of the alias mail with the reply destination address generated by the reply destination address generating procedure to transfer the alias mail, and the reply mail processing procedure includes: an originator address restoring procedure for restoring, when the reply mail is received, the originator address and the generation argument from the reply destination address that is a destination of the reply mail; an alias address regenerating procedure for regenerating the alias address from the generation argument restored by the originator address restoring procedure and the recipient address indicating the transmission source of the reply mail; and a reply mail transferring procedure for replacing the destination of the reply mail with the originator address restored by the originator address restoring unit and replacing the transmission source of the reply mail with the alias address regenerated by the alias address regenerating unit to transfer the reply mail.

Please amend paragraph [0025] of the specification at p. 4, ll. 14-19, as follows:

According to another embodiment ~~claim 15~~ of the present invention, the generation argument is information indicating transfer conditions that the alias mail transferred to the recipient should satisfy, the alias mail processing procedure further includes a transfer possibility judging unit that judges whether the alias mail satisfies transfer conditions restored

by the recipient address restoring unit, and the alias mail transferring procedure transfers only an alias mail that is judged by the transfer possibility judging unit as satisfying the transfer conditions.

Please amend paragraph [0026] of the specification, as follows:

According to another embodiment ~~claim 16~~ of the present invention, a mail transferring program that causes a computer to transfer a mail using a recipient alias address generated from a recipient address and a predetermined recipient generation argument and an originator alias address generated from an originator address and a predetermined originator generation argument, the mail transfer system comprising: a first mail processing procedure for restoring, when a mail having with a recipient reply destination address generated from the recipient alias address and the originator generation argument as a destination is received, the recipient alias address and the originator generation argument from the recipient reply destination address, regenerating the originator alias address from the originator generation argument and the originator address indicating a transmission source of the mail, and replacing the destination and the transmission source of the mail with the recipient alias address and the originator alias address to transfer the mail; a second mail processing procedure for restoring, when a mail having the recipient alias address and the originator alias address as a destination and a transmission source is received, the recipient address and the recipient generation argument from the recipient alias address, generating an originator reply destination address from the recipient generation argument and the originator alias address, and replacing the destination and the transmission source of the mail with the recipient address and the originator reply destination address to transfer the mail; a third mail processing procedure for restoring, when a reply mail having the originator reply destination address and the recipient address as a destination and a transmission source is received, the

originator alias address and the recipient generation argument from the originator reply destination address, regenerating the recipient alias address from the recipient generation argument and the recipient address, and replacing the destination and the transmission source of the mail with the originator alias address and the recipient alias address to transfer the mail; and a fourth mail processing procedure for restoring, when a reply mail having the originator alias address and the recipient alias address as a destination and a transmission source is received, the originator address and the originator generation argument from the originator alias address, generating a recipient reply destination address from the originator generation argument and the recipient alias address, and replacing the destination and the transmission source of the mail with the originator address and the recipient reply destination address to transfer the mail.

Please amend paragraph [0027] of the specification, as follows:

According to another embodiment claim 17 of the present invention, the recipient generation argument is information indicating transfer conditions that the mail transferred to the recipient should satisfy and the originator generation argument is information indicating transfer conditions that the mail transferred to the originator should satisfy, the second mail processing procedure judges whether the mails satisfy transfer conditions related to the recipient generation argument restored from the recipient alias address and transfers only a mail that satisfies the transfer conditions, and the fourth mail processing procedure judges whether the mails satisfy transfer conditions related to the originator generation argument restored from the originator alias address and transfers only a mail that satisfies the transfer conditions.

Please amend paragraph [0028] of the specification, as follows:

According to the invention ~~in claim 1, 8, or 13~~, in the processing for replacing a transmission source of a mail having an actual address as the transmission source with an alias address to transfer the mail, it is possible to replace the transmission source with the alias address without using a database. This makes it possible to realize a reduction in a burden of a burden of management of a database, an increase in speed of replacement processing, application of the transfer processing to a user having a plurality of alias addresses, and the like.

Please amend paragraph [0029] of the specification, as follows:

According to the invention ~~in claim 2, 9, or 14~~, it is unnecessary to execute special processing in a terminal on a user side that receives an alias mail. A user is capable of including a generation argument necessary for regeneration of an alias address in a reply mail simply by executing usual mail return processing.

Please amend paragraph [0030] of the specification, as follows:

According to the invention ~~in claim 3, 10, or 15~~, it is also possible to realize exclusion of a spam mail to a user. Moreover, since a database (a DB defining transfer conditions) is not used in judging possibility of transfer, it is also possible to increase speed of exclusion processing for a spam mail without causing a burden of management of a database.

Please amend paragraph [0031] of the specification, as follows:

According to the invention ~~in claim 4~~, since transfer conditions are updated according to the number of times of transfer, a transfer time, and the like, it is unnecessary to generate alias addresses many times. It is also possible to exclude a spam mail using an alias address generated once for a medium to long term.

Please amend paragraph [0032] of the specification, as follows:

According to the invention ~~in claim 5~~, since transfer conditions are updated according to the number of times of reply, a reply time, and the like, it is unnecessary to generate alias addresses many times. It is also possible to exclude a spam mail using an alias address generated once for a medium to long term.

Please amend paragraph [0033] of the specification, as follows:

According to the invention ~~in claim 6, 11, or 16~~, even when both an originator and a recipient use alias addresses, in processing for replacing a transmission source of a mail having an actual address of the originator or the recipient as the transmission source with an alias address to transfer the mail, it is possible to replace the transmission source with the alias address without using a database. This makes it possible to realize a reduction in a burden of management of a database, an increase in speed of replacement processing, application of the processing to a user having a plurality of alias addresses.

Please amend paragraph [0034] of the specification, as follows:

According to the invention ~~in claim 7, 12, or 17~~, it is also possible to realize exclusion of spam mails to both users (a recipient and an originator). Moreover, since a database (a DB defining transfer conditions) is not used in judging possibility of transfer, it is also possible to increase speed of exclusion processing for spam mails to both the users without causing a burden of management of a database.

Please amend paragraph [0053] of the specification, as follows:

As shown in the figure, the mail delivery system is constituted by connecting an

originator terminal 1, a recipient terminal 2, an outgoing side mail server 3, an incoming side mail server 4, an alias mail relay server 10, and a remailer 20 to be capable of communicating with one another via a network (a communication network formed by an outgoing side IP network 5, an incoming side IP network 6, the Internet 7, a LAN 8, a router R, a firewall FW, and the like). ~~The alias mail relay server 10 corresponds to an alias mail processing unit in claim 1 and the like and the remailer 20 corresponds to a reply mail processing unit in claim 1 and the like.~~

Please amend paragraph [0057] of the specification, as follows:

Constitution of the alias mail relay server (first embodiment)

As shown in Fig. 1, the alias mail relay server 10 includes a user address restoring unit 11, a reply address converting unit 12, and a mail transfer unit 13. ~~The user address restoring unit 11 corresponds to a recipient address restoring unit in claim 2, the reply address converting unit 12 corresponds to a reply destination address generating unit in claim 2, and the mail transfer unit 13 corresponds to an alias mail transfer unit in claim 2.~~

Please amend paragraph [0061] of the specification, as follows:

Constitution of the remailer (first embodiment)

As shown in Fig. 1, the remailer 20 includes a reply address restoring unit 21, a user address converting unit 22, and a mail transfer unit 23. ~~The reply address restoring unit 21 corresponds to an originator address restoring unit in claim 1, the user address converting unit 22 corresponds to an alias address regenerating unit in claim 2, and the mail transfer unit 23 corresponds to a reply mail transfer unit in claim 2.~~

Please amend paragraph [0098] of the specification, as follows:

As shown in the figure, the mail delivery system is constituted by connecting the originator terminal 1, the recipient terminal 2, the outgoing side mail server 3, the incoming side mail server 4, an alias mail relay server 30, and a remailer 40 to be capable of communicating with one another via the network (the communication network formed by the outgoing side IP network 5, the incoming side IP network 6, the Internet 7, the LAN 8, the router R, the firewall FW, and the like). ~~The alias mail relay server 10 corresponds to the alias mail processing unit in claim 1 and the like and the remailer 20 corresponds to the reply mail processing unit in claim 1 and the like.~~

Please amend paragraph [0101] of the specification, as follows:

Alias mail relay server (second embodiment)

As shown in Fig. 7, the alias mail relay server 30 includes a user address restoring unit 31, a reply address converting unit 32, a mail transfer unit 33, a common key storing unit 34, a transfer possibility judging unit 35, and a control information updating unit 36. ~~The reply address converting unit 32 corresponds to the reply destination address generating unit in claims 2 and 4, the mail transfer unit 33 corresponds to the alias mail transfer unit in claims 2 and 4, the transfer possibility judging unit 35 corresponds to a transfer possibility judging unit in claim 3, and the control information updating unit 36 corresponds to a transfer conditions updating unit in claim 4.~~

Please amend paragraph [0107] of the specification, as follows:

Constitution of the remailer (second embodiment)

As shown in Fig. 7, the remailer 40 includes a reply address restoring unit 41, a user address converting unit 42, a mail transfer unit 43, a common key storing unit 44, and a control information updating unit 45. ~~The user address converting unit 42 corresponds to the~~

~~alias address regenerating unit in claims 2 and 5 and the control information updating unit 45 corresponds to the transfer conditions updating unit in claim 5.~~

Please delete paragraph [0168] of the specification its entirety:

~~In Fig. 16, the remailer 60 of the left side corresponds to a first mail processing unit in claim 6, the alias mail relay server 50 on the left side corresponds to a second mail processing unit in claims 6 and 7, the remailer 60 on the right side corresponds to a third mail processing unit in claim 6, and the alias mail relay server 50 on the right side corresponds to a fourth mail processing unit in claims 6 and 7.~~